CLAIMS

What is claimed is:

Claim 1. An automatic transfer switch and protection device comprising:

a contact movable among a first position, a second position, and a third position;

a drive assembly for moving said contact among said first, second, and third positions; and

a controller for receiving a first signal indicative of a condition of power in a first power source and a second power source, said controller providing a second signal to said drive assembly to move said contact among said first, second, and third positions in response to said first signal, wherein said contact can provide power to a load from said first source in said first position, to said load from said second source in said second position, and can isolate said load from said first and second sources in said third position.

Claim 2. The device as in claim 1, wherein said first signal is indicative of said condition of power in said first power source, said condition of power in said second power source, said condition of power in a load side of said contact, a position of said contact, and combinations thereof.

Claim 3. The device as in claim 1, further comprising a sensor for determining whether said contact is in said first position, said second position, or said third position.

Claim 4. The device as in claim 1, wherein said controller is a processor, a circuit, a thermal-magnetic trip device, and any combination of the foregoing.

Claim 5. The device as in claim 1, wherein said controller is an electronic trip unit.

Claim 6. The device as in claim 1, further comprising a load-sensing fuse positioned between said contact and said load.

Claim 7. The device as in claim 1, wherein said drive assembly is a device selected from the group consisting of a solenoid, a motor, and a magnetically positioned device.

Claim 8. An automatic transfer switch and protection device comprising:

a contact movable among a first position, a second position, and a third position, said first position being configured to place a load in electrical communication with a first power source, said second position being configured to place said load in electrical communication with a second power source, and said third position being configured to isolate said load from said first and second power sources;

a controller for receiving a first signal and for generating a second signal in response to said first signal; and

a drive assembly configured to receive said second signal and to move said contact among said first, second, and third positions in response to said second signal.

Claim 9. The device as in claim 8, wherein said first signal comprises a condition of power and a position of said contact.

Claim 10. The device as in claim 9, wherein said condition of power is representative of power in a load side of said contact, power in said first power source, and power in said second power source.

Claim 11. The device as in claim 8, further comprising a load-sensing fuse positioned between said contact and said load.

Claim 12. The device as in claim 8, wherein said controller is a processor, a circuit, a thermal-magnetic trip device, and any combination of the foregoing.

Claim 13. An automatic transfer switch and protection device comprising:

a first contact position configured to place a load in electrical communication with a first power source;

a second contact position configured to place said load in electrical communication with a second power source;

a third contact position configured to isolate said load from said first and second power sources; and

means for moving among said first, second, and third contact positions in response to a condition of power in said first and second power sources.

Claim 14. The device as in claim 13, wherein said condition of power comprises a first signal.

Claim 15. The device as in claim 14, wherein said first signal further comprises a load power consumption.

Claim 16. The device as in claim 14, wherein said first signal further comprises an indication of whether the device is in said first contact position, said second contact position, or third contact position.

Claim 17. The device as in claim 13, wherein said moving means comprises:

a controller for receiving a first signal indicative of said condition of power, said controller sending a second signal to a drive assembly in response to said first signal, said drive assembly moving among said first, second, and third contact positions in response to said second signal.

Claim 18. The device as in claim 17, wherein said drive assembly is a device selected from the group consisting of a solenoid, a motor, and a magnetically positioned device.

Claim 19. The device as in claim 17, wherein said controller is a processor, a circuit, a thermal-magnetic trip device, and any combination of the foregoing.

Claim 20. The device as in claim 19, further comprising a load-sensing fuse positioned between said load and said first, second, and third contact positions.